



ADVANCED POLYMER, INC.

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HARDLEN[®] 14LWP

HARDLEN 14LWP is a solvent soluble chlorinated polypropylene adhesion promoter . HARDLEN 14LWP can be used in primers, paints, coatings and adhesives.

CHARACTERISTICS

- Superior adhesion to PP or PP/EPDM
- Tough, transparent film after coating and drying

APPLICATION

- Insoluble in polar solvents, but soluble in aromatic, aliphatic cyclic hydrocarbons and chlorinated hydrocarbon solvents.
- Suitable for use in sprayable coatings for polypropylene that can be air or forced dried.

PACKAGING

HARDLEN 14LWP is supplied as 100% resin in pellet form and is available in 8 oz. samples or 110-lb bags.

Hardlen[®] is a registered trademark of Toyobo Co. Ltd.

Advanced Polymer, Inc.

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I want to know more!

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TYPICAL PROPERTIES

Appearance:	Slightly yellowish pellet
Orientation:	Isotactic
Chlorine Content:	27%
Resin Content:	100%
Solution Viscosity: (15% toluene solution)	100-500 cps
Softening Point:	93°C
Molecular Weight:	80,000

You may also be interested in . . .

HARDLEN® 14LWP

Section I Product Identity

Product Name: HARDLEN 14LWP
Chemical Name/Family: Chlorinated polypropylene
CAS#: 68442-33-1
24 Hour Emergency Number 800-424-9300
24 Hour Chemtrec Number 800-424-9300
All ingredients are listed in EPA's TSCA list of chemical substances

Section II Hazardous Components/Composition Information

CHEMICAL

CAS#:	USOS:	TWA :	STEL :	PERCENT:
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Section III Physical and Chemical Properties

Melting Point	90°C (194°F)
Specific Gravity (H ₂ O=1)	1.20
Vapor Pressure	N/A
Vapor Density (Air=1)	N/A
Percent Volatile By Weight	N/A
Evaporation Rate (BuAc=1)	N/A
Solubility in Water	Not Soluble
Appearance and Odor	Translucent pellet.

Section IV Fire and Explosion Hazard Data

Flash Point (Method Used)	N/A
Flammable Limits in Air (% By Volume)	N/A
Extinguishing Media	Foam, Dry Chemical, CO ₂
Special Fire Fighting Procedures	Evacuate personnel to a safe area. Wear self-contained breathing apparatus. Wear full protective equipment.
Unusual Fire and Explosion Hazard	None

Section V Reactivity Data

Stability	Stable
Conditions to Avoid	Store in a well ventilated place at temperatures below 120°F. Keep container tightly closed. Avoid heat, flames, sparks and other sources of ignition. Keep out of water supplies and sewers.
Incompatibilities	Combustible materials, acids, oxidizing agents, aluminum at high temperatures.
Hazardous Decomposition or By Products	Combustion may produce CO ₂ , CO, chlorine and toxic vapors.
Hazardous Polymerization	May Not Occur

Section VI Health Hazard Data

Primary Routes of Entry	Inhalation: No	Dermal: Yes	Ingestion: Yes
Acute Health hazard	No information available		
Chronic Health Hazard	No information available		
Carcinogenicity			
NTP: No	IARC Monograph: No	OSHA Regulated: No	

Signs and Symptoms of Exposure:

Skin Contact	Prolonged and repeated contact with skin can cause defatting and drying of the skin resulting in skin irritation and dermatitis.
Eye Contact	Preexisting eye, skin and respiratory disorders may be aggravated by exposure to this product.
Ingestion	Although ingestion is unlikely, liquid would irritate upper digestive tract if swallowed. May cause severe irritation.
Inhalation	No information is available.

Medical Condition Generally Aggravated by Exposure

Emergency First Aid Procedures

Eyes	Immediately flush eyes with plenty of water. Call a physician.
Skin	Immediately wash skin with soap and water. Remove contaminated clothing and wash before reuse.
Ingestion	Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a physician.
Inhalation	Immediately remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. Please note: Symptoms may be delayed; prompt medical attention may be required. Call a physician.

Section VII Precautions for Safe Handling and Use

Steps to be Taken in Case the Material is Released or Spilled:

Soak up with sawdust, sand, oil dry or other absorbent material. Keep out of water supplies and sewers.

Waste Disposal Method As in accordance with EPA and local regulations.

Section VIII Special Precautions

Precautions to be Taken in Handling and Storage:

Store in a well-ventilated place at temperatures below 120°F. Keep container tightly closed. Keep from freezing.

Section IX Control Measures

Respiratory Protection	Approved air-purifying respirator with organic vapor cartridge or canister
Ventilation	Local exhaust Recommended Mechanical Special Other
Eye Protection	Safety glasses should be worn
Protective Gloves	Rubber or plastic gloves should be worn
Protective Clothing	Rubber apron
Other Protective Equipment	NIOSH approved respirator as needed
Other Precautions	Wash hands after use.

Section X SARA Title III

SECTION 313 SUPPLIER NOTIFICATION

This product contains the following toxic chemicals subject to the reporting requirements of SECTION 331 of the EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT OF 1986 and of 40 CFR 371

CAS #

Chemical Name

Percent by Weight

THIS INFORMATION MUST BE INCLUDED IN ALL MSDS'S THAT ARE COPIED AND DISTRIBUTED FOR THIS MATERIAL

Section XI Transportation Information

SHIPPING INFORMATION

Hazard Ratings

Health	1
Flammability	1
Reactivity	0

Date Prepared October 16, 2005
Prepared By API
Date Revised November 3, 2009
Revised By API

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